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10/581,520	06/02/2006	Yasuyuki Kenmoku	291173US3PCT	3649

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EXAMINER

LOUIE, MANDY C

ART UNIT	PAPER NUMBER
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1792

NOTIFICATION DATE	DELIVERY MODE
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10/07/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/581,520	Applicant(s) KENMOKU ET AL.	
	Examiner MANDY C. LOUIE	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 1-6 are objected to because of the following informalities: In claim 1, “turnings paths” in line 17 should be corrected to “turning paths”. Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Ogasawara [JP 2003-144990].

Regarding claim 1, Ogasawara teaches a method for coating a surface of an object comprising: dividing said coating surface into a plural number of coating areas, where each area is coated by at least one coater that reciprocates [abstract], sequentially shifting position of a first set of turning paths for reciprocation of at least

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one sprayer unit in one of two directions of said reciprocation and coating a specific area of said divided coating areas [of Fig. 2, i.e. T1R, T1L], while forming a coating trajectory of said turning paths like a series of steps such that each successive one of the turning paths of the at least one sprayer unit along one edge (along the boundary where the hood and windshield meet) of the specific coating area extends furthering a first direction than each previous one of the turning path along the one edge of the specific coating area [Fig. 2, T1L, due to the dimensional curve of the area]; and sequentially shifting position of a second set of turning paths for reciprocation of said at least one sprayer unit said one direction to avoid overlapping with the first set of turning paths in a specific coating area and coating a different coating area which is adjacent to said specific coating area while forming a coating trajectory of said second set of turning paths like a series of steps such that each successive one of the second set of turning paths along one edge of the different coating area (along the boundary where the hood and windshield meet), adjacent to the one edge of the specific coating area, extends less in a second direction opposite to the first direction (wherein the first direction is angled outward from the center of the object, and the second direction angled inward of the center of the object) than each previous one of the second set of turning paths along the one edge of the different coating area [Fig. 2, T1R, due to the dimensional curve of the area].

Regarding claim 2, Ogasawara teaches a method of coating, wherein the coating the specific coating area and the coating the different coating area are performed in a manner such that paint is sprayed by at least one sprayer unit at parallel transit path

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and is cut at said turning paths for said reciprocation during said reciprocation of said at least one sprayer unit [abstract].

Regarding claim 3, Ogasawara teaches a method of coating, which further comprises: moving said object to be coated in a predetermined conveying direction via conveying means [0018; Fig. 1], wherein, while at least one sprayer unit reciprocated in a direction substantially parallel to said conveying direction of said object to be coated, locations of said first and second set of turning paths are sequentially shifted from a front side to the rear side in said conveying direction of said object (hood area).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogasawara in view of Baba [JP 06-262564].

Teaching of Ogasawara is aforementioned, but appears to be silent in teaching the limitations of claims 4-6. Baba remedies this.

Regarding claims 4-5, Baba also teaches a method for coating a robot, wherein the shape of the car hood is flat in the front and curved at the boundary where the hood

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and the windshield meets. Such that it would have been obvious to one of ordinary skill in the art that the transit paths of Ogasawara when applied to such car shape of Baba would innately either have a successive transit path that is shorter than a previous transit path, or a successive transit path that is longer than a previous transit path.

Hence, such paths would be depended upon the shape of the area being treated, wherein Baba teaches such shapes would affect the transit patterns for spray [Fig. 15].

Moreover, it would have been obvious to one of ordinary skill in the art at the time of the invention to optimize the length of the transit path as a workable parameter, so as to reduce waste of spray material upon treating various shaped objects.

Regarding claim 6, Baba also teaches a coating method, wherein at least one sprayer unit reciprocated in a direction substantially perpendicularly to said conveying direction of said object to be coated, locations of said first and second set of turning paths are sequentially shifted from a front side to the rear side in the conveying direction of said object (i.e. hood area), wherein such reversal of parts (parallel to the conveying direction, or perpendicular to the conveying direction) modification would have been obvious to one of ordinary skill in the art. (See MPEP 2144.04.VI.A).

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140

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F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-3 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1-2, 5 of copending Application No. 10/581297 (hereinafter '297) in view of Ogasawara.

'297 is silent of providing a second set of turning paths which extends less in a second direction opposite to the first direction than the each previous one of the second set of turning paths along the one edge. Ogasawara remedies this.

Teaching of Ogasawara is aforementioned. It would have been obvious to one with ordinary skill in the art to teach a second set of turn paths. One would have been motivated to do so to increase coating efficiency and throughput of the object by using multiple spray units.

This is a provisional obviousness-type double patenting rejection.

Response to Arguments

3. Applicant's arguments filed 06/17/09 have been fully considered but they are not persuasive.

In regards to Applicant's arguments on page 6, paragraph 3 to page 8, paragraph 2, wherein it is argued by the Applicant that Ogasawara fails to teach the instant claims, it is noted by the Examiner that the instant rejection still relies upon the Fig. 2 of Ogasawara; however, drawn to a different area (i.e. hood lid) of the figure than previously presented (i.e. trunk), wherein such teaching is described above. Hence, arguments of present are moot to the new rejection. Furthermore, it is noted by the Examiner, that Baba is now relied upon in teaching the new claims 4-6, rather than previously relied upon for rejecting claims 1-3.

Conclusion

1. No claim is allowed.
2. Claims 1-6 are objected for the reasons aforementioned.
3. Claims 1-6 are rejected for the reasons aforementioned.
4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MANDY C. LOUIE whose telephone number is (571)270-5353. The examiner can normally be reached on Monday to Friday, 7:30AM - 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571)272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. C. L./

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Examiner, Art Unit 1792

/Timothy H Meeks/

Supervisory Patent Examiner, Art Unit 1792